

CLAIMS

1. Assembly tool for a securing system comprising:
  - an elongate profiled-section element having a top side which  
5 is provided with two flanges which delimit a longitudinal slot,  
and which profiled-section element also has a base lying  
opposite the top side,
  - an elongate nut body of a width which is less than the  
width of the longitudinal slot in the profiled-section element  
10 and a length which is greater than the width of the longitudinal  
slot in the profiled-section element, which nut body also has a  
top side, an underside and, surrounding it, two short sides and  
two long sides, the nut body also being provided with a bore and  
on the underside being provided with a downwardly projecting  
15 spring,  
the longitudinal axis of the nut body, during assembly, being  
brought into line with the longitudinal slot, and the nut body  
being moved into the profiled-section element between the  
flanges, with the underside facing towards the base of profiled-  
20 section element, so that the spring engages on the base of the  
profiled-section element, and the nut body then being rotated in  
order to engage behind the flanges, with the spring pressing the  
nut body towards the top side of the profiled-section element  
and onto the flanges,
- 25 characterized in that the assembly tool can be applied to the  
nut body, in that the nut body can be introduced into the  
profiled-section element by means of the assembly tool, in that  
the assembly tool can rotate, with the nut body rotating with  
it, and in that the assembly tool can be removed from the nut  
30 body.
2. Assembly tool according to claim 1, characterized in that  
it is designed to be fitted to the nut body as it is being  
applied to the nut body and to be pulled away from the nut body  
35 as it is being removed from the nut body.
3. Assembly tool according to claim 1 or 2, characterized in  
that it is designed to engage in clamping manner on the nut  
body.

4. Assembly tool according to one of claims 1-3, characterized in that it comprises an engagement part for engaging on the nut body, an intermediate part connected to the engagement part and a handling member connected to the intermediate part allowing  
5 the tool to be handled.

5. Assembly tool according to claim 4, characterized in that the engagement part comprises a pressure-exerting surface and at least one projection which extends from the pressure-exerting  
10 surface substantially perpendicular to the pressure-exerting surface,  
the pressure-exerting surface having a minimum cross-sectional dimension which is such that it is no larger than the width of the longitudinal slot, and being designed to engage on the top  
15 side of the nut body during use in order to press the nut body into the profiled-section element between the flanges of the profiled-section element,  
the projection being designed to engage on a long side of the nut body during use, in such a manner that a rotary movement of  
20 the handling member and the pressure-exerting surface about an axis of rotation which extends substantially perpendicular to the pressure-exerting surface results in a rotary movement of the nut body,  
and the handling member being designed to be able to exert a  
25 compressive force and a rotational force on the nut body at a distance from the pressure-exerting surface.

6. Assembly tool according to claim 4 or 5, characterized in that the handling member of the assembly tool comprises a  
30 handgrip.

7. Assembly tool according to claim 5, characterized in that the intermediate part comprises a body with a maximum cross-sectional dimension which is smaller than the width of the  
35 longitudinal slot in the profiled-section element, the handling member being formed at one end of the body and the pressure-exerting surface being formed at the other end of the body, the pressure-exerting surface being positioned substantially perpendicular with respect to the centre axis of the body.

8. Assembly tool according to one of claims 5-7, characterized in that the handling member has a minimum cross-sectional dimension which is larger than the width of the longitudinal slot in the profiled-section element, and in that the distance  
5 in the axial direction from the pressure-exerting surface to the handling member is at least equal to the distance between the top side of the profiled-section element and the bottom edge of the flange.
- 10 9. Assembly tool according to one of claims 5-8, characterized in that the pressure-exerting surface has a cross-sectional dimension which approximately corresponds to the width of the nut body.
- 15 10. Assembly tool according to one of claims 5-9, characterized in that a protuberance is arranged on the pressure-exerting surface and is designed to be fitted into the bore in the nut body during use.
- 20 11. Assembly tool according to claim 10, characterized in that the protuberance is located in the centre of the pressure-exerting surface.
- 25 12. Assembly tool according to one of claims 5-11, characterized in that two projections are arranged opposite one another on either side of the edge of the pressure-exerting surface in order, during use, to engage on the opposite long sides of the nut body, the distance between the outermost edges of the projections being smaller than the width of the  
30 longitudinal slot of the profiled-section element.
13. Assembly tool according to claim 12, characterized in that the projections are designed to engage in clamping fashion on the nut body.
- 35 14. Assembly tool according to one of claims 4-13, characterized in that the handling member, the intermediate part and the engagement part are formed integrally.

15. Assembly tool according to one of the preceding claims, characterized in that it is made from plastic.

16. Assembly tool according to one of the preceding claims,  
5 characterized in that a direction indicator is arranged on the handling member for indicating the position of the assembly tool and the nut body with respect to the longitudinal slot in the profiled-section element during assembly.

10 17. Combination of an elongate nut body and an assembly tool according to one of the preceding claims.

18. Method for mounting an elongate nut body provided with spring means in an elongate profiled-section element,

15

- which profiled-section element has a top side which is provided with two flanges which delimit a longitudinal slot, and which profiled-section element also has a base lying opposite the top side,

20

- which nut body has a width which is less than the width of the longitudinal slot in the profiled-section element and a length which is greater than the width of the profiled-section element, which nut body also has a top side, an underside, two short  
25 sides and two long sides, the nut body being provided with a bore and on the underside also being provided with a downwardly projecting spring,

the longitudinal axis of the nut body being brought into line  
30 with the longitudinal slot, and the nut body being moved into the profiled-section element between the flanges, with its underside facing the base of the profiled-section element, so that the spring engages on the base of the profiled-section element, and then being rotated in such a manner that the nut  
35 body engages behind the flanges, the spring pressing the nut body towards the top side of the profiled-section element and onto the flanges,

characterized in that an assembly tool is fitted to the top side

of the nut body, in that the nut body is introduced into the profiled-section element with the aid of the assembly tool, in that the assembly tool is rotated so that the nut body is rotated, and in that the assembly tool is removed from the nut  
5 body by means of a pulling movement.

19. Method according to claim 18, in which use is made of an assembly tool according to one of claims 1-16.

10 20. Securing system comprising:

- an elongate profiled-section element having a top side which is provided with two flanges which delimit a longitudinal slot, and which profiled-section element also has a base lying opposite the top side,
- 15 - an elongate nut body of a width which is less than the width of the longitudinal slot in the profiled-section element and a length which is greater than the width of the longitudinal slot in the profiled-section element, which nut body also has a top side and on the underside is provided with a downwardly  
20 projecting spring,  
the longitudinal axis of the nut body, during assembly, being brought into line with the longitudinal slot, and the nut body being moved into the profiled-section element between the flanges, with the underside facing towards the base of profiled-  
25 section element, so that the spring engages on the base of the profiled-section element, the nut body then being rotated in order to engage behind the flanges, with the spring pressing the nut body onto the flanges, characterized in that the spring is provided, at the end which engages on the base of the profiled-  
30 section element, with a sliding part comprising a sliding foot.

21. Securing system according to claim 20, characterized in that the base of the profiled-section element is provided with a pattern of holes, the sliding foot of the spring being wider  
35 than the smallest dimension of the holes.

22. Securing system according to claim 20 or 21, characterized in that the sliding foot is formed as a plate.

23. Securing system according to claim 22, characterized in that the sliding foot is formed as a substantially circular plate.

5 24. Securing system according to claim 22, characterized in that the sliding foot is formed as a substantially rectangular plate.

10 25. Securing system according to one of claims 20-24, characterized in that the sliding part engages in clamping fashion on the spring.

15 26. Securing system according to one of claims 20-25, characterized in that the spring is a coil spring.

27. Securing system according to one of claims 20-26, characterized in that the spring is made from metal, preferably spring steel.

20 28. Securing system according to claim 26, characterized in that a protuberance is arranged on the sliding foot, the protuberance having a maximum external dimension which approximately corresponds to the internal diameter of the free end of the coil spring.

25 29. Securing system according to claim 28, characterized in that the protuberance has a substantially circular periphery.

30 30. Securing system according to claim 29, characterized in that the protuberance is in the shape of a ring.

35 31. Securing system according to claim 26, characterized in that protuberances positioned on an imaginary circle are arranged on the sliding foot, the circumference around the protuberance having a diameter which approximately corresponds to the internal diameter of the free end of the coil spring.

32. Securing system according to claim 30, characterized in that the protuberance engages in clamping fashion, by means of

the outermost ring surface, on the innermost surface of the end of the coil spring.

33. Securing system according to claim 26, characterized in  
5 that a hollow cylinder part is arranged on the sliding foot, surrounding the bottom end of the spring.

34. Securing system according to one of claims 20-33,  
characterized in that the sliding part is made from plastic.

10

35. Nut body having a spring and a sliding part which is prefitted thereon, clearly for use in a securing system according to one of claims 20-34.

15 36. Sliding part clearly for use in a securing system according to one of claims 20-34.

37. Package which includes one or more nut bodies and one or more sliding parts as described in claim 36.

20

38. Package which includes one or more nut bodies according to claim 35.

39. Package according to claim 37 or 38 which also includes an  
25 assembly tool according to one of claims 1-16.

40. Package which includes a plurality of nut bodies and an assembly tool according to one of claims 1-16.